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Reply to Office action of February 23, 2006

REMARKS/ARGUMENTS

Claims 1-28 are currently pending in the application. Claims 24-28 are added. Support for these claims can be found throughout the specification and Figures. No new matter has been added. Reconsideration is respectfully requested.

I. Interview

Applicant thanks the Examiner for the time and courtesy extended to Applicant's representative during the personal interview of June 19, 2006. During the interview, the difference between the prior art of record and present invention was discussed and demonstrated. No agreement on claims was reached pending further searching by the examiner.

II. Rejection under 35 U.S.C. §112

On page 2 of the office action, the Examiner rejected claim 23 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner contends that "[a] 'connecting body disposed between and attached to the tip and the transformer' has not been enabled by the specification because this language cannot be found in the specification, and it is not clear what is being referred to." Applicant assumes that the Examiner is referring to "a connecting body disposed between and attached to the tip and the transducer." (Emphasis added).

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Applicant respectfully traverses the rejection. Applicant submits that a “connecting body disposed between and attached to the tip and the transducer” is fully enabled by the specification, for example, in FIG. 8 and on page 9, line 28 to page 10, line 28. In addition, since originally filed claims are part of the specification, Applicant has amended the specification to incorporate the information of claim 23 into the specification (See Amendment to the Specification above). Therefore, Applicant respectfully requests that the rejection of claim 23 under 35 U.S.C. §112, first paragraph, be withdrawn. Reconsideration is respectfully requested.

III. Rejections under 35 U.S.C. § 102

Claim 15 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,716,028 ("Rahman et al."). Examiner contends that "Rahman shows a body 12a rotatably receiving a transducer 14a or 20a, rotator head 14c, 20c, and means 14, 24 fixedly coupled to the rotator head and rotatably coupled to the body."

Applicant respectfully traverses the rejection.

In Rahman et al., “[a] rotatable ultrasonic insert has a body section which carries a bearing for rotatably engaging an ultrasonic handpiece. The body is rotatable, about an axial centerline. Rotation can be effected by applying a force only to the insert. In response, the insert rotates but the handpiece does not. Hence, single handed, two finger rotation is possible.” (Emphasis added) See col. 2, lines 33-38. The rotatable portion of the insert is clearly shown in FIG. 2A when force is applied to the grip 20c on the insert. See FIG. 2A. “Hence, if the member 24 is fixed, the body 20b, gripping member 20c and tip 20e are readily rotatable therein” (Emphasis added). See col. 4, lines 38-42. Similarly, “a user can rotate insert 14 relative to

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handpiece 12a by applying rotary forces to the grip 14c in a manner analogous to the way in which rotary forces are applied to the grip 20c of rotatable insert 20" (Emphasis added) See col. 8, lines 38-42. The grip member 14c or 20c is on the insert.

In contrast, claim 15 of the present invention relates to a handpiece having "a rotator head engaging such transducer for rotation . . ."

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. Applicant respectfully submits that based on the above comments, it is clear that Rahman et. al. does not disclose each and every element as set forth in claim 15. Thus, claim 15 is patentable over Rahman et al. Reconsideration is respectfully requested.

IV. Rejection under 35 U.S.C. § 103(a)

1. Claims 1-4, 13-19 and 21-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al. in view of U.S. Patent No. 6,012,922 ("Novak"). The Examiner notes that Rahman et al. shows a transducer 14a, body 12a rotatably receiving the transducer, rotator head 14c engaging the transducer for rotation thereof and coupling means as shown in the

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figures. The shown coupling means of Rahman is not in the form of a ring. Novak teaches a rotatably connected rotator head 14 on body 15 and shows using a retainer ring 18, Figs. 2 and 5, to enable the relative rotation. Based on these, the Examiner contends that it would be obvious to one of ordinary skill in the art to modify Rahman et al. to include using a ring coupling means as shown by Novak in order to make use of known alternatives in the art for allowing elements to rotate with respect to each other. As to claim 2, the Examiner contends that to use a metal ring is an obvious matter of choice in known materials used of coupling rings to the skilled artisan. As to claims 3 and 4, the Examiner notes that grooves 24 and 26 are shown in Rahman et al. As to claims 13 and 14, the Examiner notes column 1, line 33, of Rahman et al. As to claim 17, the Examiner notes coil in column 2, line 45 of Rahman et al. As to claim 18, the Examiner notes electric and fluid source in column 1, lines 25-30 of Rahman et al. As to claims 21 and 22, the Examiner notes nickel plates in column 1, line 42, of Rahman et al.

Applicant respectfully traverses the rejection.

As noted above, Rahman et. al. teaches that “rotation can be effected by applying a force only to the insert”. (Emphasis added). Novak teaches the construction of a prophylactic handpiece, which uses gears to drive a prophylactic cup attachment. Novak teaches that a “ring seal 18 is a snap ring that allows for free rotation of housing 14 with respect to secondary housing 15, although the two housing sections 14 and 15 are not disengageable due to snap ring 18” col. 4, lines 12-15 (Emphasis added). Thus, Novak’s teaching is basically the same as that of Rahman et. al, that for two concentric parts, if one part is fixed, the second part can be rotated with respect to the fixed part. Therefore, not only is there no motivation or teaching in Rahman et. al. to suggest the

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combination of its teaching with that of Novak, there also is no motivation or teaching to arrive at the present invention of a handpiece having a rotator head engaging such transducer for rotation.

Three criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. MPEP § 2142. Applicant respectfully submits that there is no suggestion or motivation in Rahman et. al. to suggest to one of ordinary skill in the art to arrive at the present invention. Using a rotator head to rotate an insert, the subject matter of claims 1, 15 and 17, represents a completely different invention from the teaching of Rahman et. al. or Novak. Therefore, claims 1, 15 and 17 are not obvious over Rahman et. al. in view of Novak.

Claims 2-4, 6-14, 16 , 18-19, and 12-23 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al in view of Novak. These claims depend from claims 1, 15 and 17, respectively. While Applicant does not acquiesce with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent claims 1, 15 and 17. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish the claim from the cited references. Therefore, dependent claims 2-4 and 6-14, 16, 18-19, and 12-23 are also in condition for allowance.

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Applicant respectfully requests that the rejection of claims 2-4 and 6-14, 16, 18-19, and 12-23 under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al in view of Novak be withdrawn. Reconsideration is respectfully requested.

2. Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al in view of Novak as applied to claim 1 above, and further in view of U.S. Patent No. 5,655,906 ("Coss et al."). The Examiner concedes that the above combination of Rahman et. al. and Novak does not show using a plurality of grooves, claim 5, and slots, claim 6. However, the Examiner contends that "Coss shows a plurality of grooves and slots as shown on the body 10 in Fig. 1." Further, the Examiner contends that "[i]t would be obvious to one of ordinary skill in the art to modify the above combination to include grooves and slots as shown by Coss in order to improve the grip. That these structures may be used to mount a lock and hand grip is merely intended use, all the actual structure being shown, the intended use with inferentially claimed elements is not given patentable weight."

Applicant respectfully traverses the rejection.

As noted above, claim 1 is patentable over Rahman et. al. in view of Novak. The deficiencies of Rahman et. al. in view of Novak to reject claim 1 are not supplied by Coss et. al., as Coss et al. teaches "a sonic drive assembly encased within a sheath" for ease of sterilization. See col. 2, line 7. "The tip is easily removable for sterilization. Once the tip is removed, the sheath is easily separable from the enclosed drive assembly by means of a push-pull, quick disconnect arrangement. This enables the sheath to be separately cleaned and sterilized while the drive assembly, not having been contaminated, can be reinserted into a sterilized sheath and

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connected to a sterilized tip for use with the next patient.” See col. 2, lines 17-23. Therefore, claim 1 is patentable over Rahman et. al. in view of Novak, and further in view of Coss et. al.

Claims 5 and 6 depend from claim 1. While Applicant does not acquiesce with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish the claims from the cited references. Therefore, dependent claims 5 and 6 are also in condition for allowance. Reconsideration is respectfully requested.

3. Claims 7-10 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al. in view of Novak as applied to claim 1 above, and further in view of U.S. Patent No. 3,654,502 ("Carmona et al."). As to claim 7, the Examiner notes that Rahman et al. teaches use of a coil is known, however, the Examiner concedes that it does not specifically show a coil in the embodiments, and as to claim 8, does not show a coil mounted on a bobbin, and as to claim 9, does not show a sealing O-ring, and as to claim 10, does not show a cavity through the bobbin for fluid; but notes that "Carmona teaches a coil 36, bobbin 16, O-ring 30 and fluid 66 within the bobbin." The Examiner contends that it would be obvious to one of ordinary skill in the art to modify the above combination to include the structures shown by Carmona et al. in order to make use of known ways in the art to better mount a coil and provide fluid flow.

Applicant respectfully traverses the rejection.

As stated in 1 and 2 above, claims 1 and 17 are patentable over Rahman et. al and Novak.

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Carmona et. al. discloses a magnetostrictive transducer. The deficiencies of Rahman et. al. in view of Novak to reject claims 1 and 17 are not supplied by Carmona et. al., and claims 1 and 17 are patentable over Rahman et. al. in view of Novak, and further in view of Carmona et al.

Claims 7-10 and 20 are dependent from claims 1 and 17, respectively. While Applicant does not acquiesce with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent claims 1 and 17. These dependent claims include all of the limitations of the respective base claims and any intervening claims, and recite additional features which further distinguish the claims from the cited references. Therefore, dependent claims 7-10 and 20 are also patentable over Rahman et. al. in view of Novak, and further in view of Carmona et. al. Reconsideration is respectfully requested.

4. Claims 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahman et al. in view of Novak and Carmona et al. as applied to claim 8 above, and further in view of U.S. Patent No. 5,395,240 ("Paschke et al."). The Examiner admits that the above combination does not show a connection member that uses a connection plug pin, but notes that Paschke et al. teaches using a plug pin, Figs. 1-3 and elements 27-29 in Fig. 5. Thus, the Examiner contends that "[i]t would be obvious to one of ordinary skill in the art to modify the above combination to include a coupling including pin connectors as shown by Paschke in order to releasably connect the hand tool to electric and fluid sources."

Applicant respectfully traverses the rejection.

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For the same reasons as those stated above, claim 1 is patentable over Rahman et al. in view of Novak and Carmona et al.

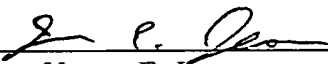
Paschke discloses a sterilizable handpiece. It also does not supply the deficiencies of Rahman et. al. in view of Novak and further in view of Carmona et. al. to reject claim 1. Thus, claim 1 is patentable over Rahman et al. in view of Novak and Carmona et al., and further in view of Paschke et al., and for the same reasons as stated above for claim 8, claims 11 and 12, are also in condition for allowance. Reconsideration is respectfully requested.

V. Conclusion

In view of the reasons provided above, it is believed that all pending claims are in condition for allowance. Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication or any other remaining issues, the Examiner is cordially invited to call Applicant's attorney of record at the number listed below.

Respectfully submitted,
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